

## PROFESSIONAL SERVICES CONTRACT

This contract is made and entered into the 28 day of February 2005 between the South Central Montana Interoperability Consortium (consisting of Gallatin, Madison, Meagher, Park and Sweet Grass Counties, Montana and hereinafter referred to as SCMIC) and CTA Communications, Inc., a Virginia corporation, having offices at 20715 Timberlake Road, Suite 106, Lynchburg, Virginia, 24502 (hereinafter referred to as CTA).

### STANDARD TERMS AND CONDITIONS

By entering into this agreement, CTA agrees to acceptance of the following Standard Terms and Conditions as well as any other provisions that are specific to this contract as set forth herein.

- 1. Authority:** This contract is issued under authority of Title 18, Montana Code Annotated, and the Administrative Rules of Montana, Title 2, Chapter 5.
- 2. Access and Retention of Records:** CTA agrees to provide SCMIC, the state of Montana or their authorized agents, access to any records necessary to determine contract compliance (MCA. 18-1-118). CTA agrees to create and retain records supporting the services rendered or supplies delivered for a period of three years after either the completion date of this contract or the conclusion of any claim, litigation, or exception relating to the contract taken by the State of Montana, SCMIC or a third party.
- 3. Assignment, Transfer and Subcontracting:** CTA shall not assign, transfer or subcontract any portion of the contract except as expressly set forth therein without the express written consent of SCMIC (MCA 18-4-141)
- 4. Compliance With Laws:** CTA must, in the performance of work under this contract, fully comply with all applicable federal, state, or local laws, rules and regulations, including the Montana Human Rights Act, The Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Changes to these requirements after the effective date of this Agreement may be the basis for modifications to SCMIC's responsibilities or to CTA's scope of services, times of performance or compensation, or combination thereof. In the event of a conflict between any such laws, rules, regulations, ordinances, or codes, CTA shall notify SCMIC of the nature and impact of such conflict. SCMIC agrees to cooperate and work with CTA in an effort to resolve any such conflict. In any event, Montana Law not preempted by federal law shall control. Any subletting or subcontracting by CTA subjects subcontractors to the requirements of this paragraph. In accordance with section 49-3-2-7, MCA, CTA agrees that the hiring of persons to perform the contract will be made on the basis of merit and qualifications and there will

be no discrimination based upon race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability or national origin by persons performing the contract.

**5. Conformance With Contract:** No alterations of the terms, conditions, delivery, price, quality, quantities or specifications of the contract shall be granted without prior written consent of SCMIC. Material delivered which does not conform to the contract terms, conditions and specifications may be rejected and returned at CTA's expense.

**6. Debarment:** CTA certifies, by signature hereon, that neither it nor its principals are presently debarred, suspended or proposed for debarment, declared ineligible or voluntarily excluded from participation in this contract by any governmental department or agency.

**7. Force Majeure:** Neither party shall be responsible for failure to fulfill its obligations due to causes beyond its reasonable control, including without limitation, acts or omissions of government or military authority, acts of God, materials shortages, transportation delays, fires, floods, labor disturbances, riots, wars, terrorist acts or any other causes, directly or indirectly beyond the reasonable control of the non-performing party, so long as such party is using its best efforts to remedy such failure or delays.

**8. Hold Harmless/Indemnification:** CTA agrees to indemnify, and save the State and Counties, their elected and appointed officials, agents and employees, while acting within the scope of their duties as such, harmless from and against all claims, demands, causes of actions, liabilities, damages, costs and expenses (including reasonable attorney's fees and costs) on account of bodily or personal injuries, death or damage to property to the extent caused by the negligent acts or intentional omissions of CTA and/or its agents, employees, representatives, assigns, subcontractors.

**8. Separability:** A declaration by any court or any other binding legal source, that any provision of the contract is illegal and void shall not affect the legality and enforceability of any other provision of the contract, unless the provisions are mutually dependent.

**10. Termination of Contract for Failure to Perform:** Unless otherwise stated, SCMIC may, by written notice to CTA, terminate the contract in whole or in part at any time CTA fails to perform any material elements of the contract.

**11. Unavailability of Funding:** SCMIC, at its sole discretion, may terminate or reduce the scope of the contract if available funding is reduced for any reason. (MCA 18-4-313 (3).)

**12. U. S. Funds:** All prices and payments must be made in U.S. dollars.

**13. Venue:** This contract is governed by the laws of Montana. The parties agree that any litigation concerning this contract must be brought in the Fifth Judicial District in and for Madison County, State of Montana, and each party shall pay its own costs and attorney fees. (MCA 18-1-1401.)

### **SERVICES AGREEMENT**

**14. Period of Performance:** The period of performance of this Agreement, for the purpose of issuing task orders hereunder, is from 28 February 2005 to 31 December 2005. This contract may be extended by mutual agreement of both parties in writing.

**15. Work to be Performed:** Subject to the provision herein, CTA shall, in accordance with task orders issued hereunder, perform tasks in the general area of addressing the problems which must be overcome to arrive at a reliable and effective communications system capable of providing interoperable wireless voice and data exchange as well as alerting for the entire spectrum of emergency management and response. The ultimate goal of SCMIC is to provide for an interoperable multimode radio communications system for the five county area based on federal and state communication standards in which federal, state and local public safety and emergency management representatives can operate autonomously and transition seamlessly while communicating effectively in emergency mission roles as well as in other appropriate administrative and command and control roles. When fully implemented, such a system is intended to provide advanced digital, secure voice and data communications for public safety and to improvement of homeland security and will incorporate the State's Mutual Aid and Common Frequencies. Backwards compatibility is inherently a part of the project since ultimate achievement will undoubtedly occur by a process of phasing in P25 dual mode equipment, at least for the foreseeable future. Compliance with all the provisions of Project 25 (APCO 25) will be required. The system planned will be a VHF high band system. The work undertaken under this contract will constitute the initial phase of this overall project. During this phase an assessment will be made of the radio communications capabilities and needs, both collectively and individually of the members of the consortium. A comprehensive plan for achievement of the overall goals will be developed emphasizing flexibility, survivability and the perspective of the ultimate users of the system. It will also provide a phased and prioritized basis for group and/or individual county procurement, training and exercising during the subsequent implementation phase.

**16. Statement of Work:** An initial statement of work to be performed is provided as Attachment A and made a part of this agreement. SCMIC may, from time to time, issue written task orders under this agreement which will specify: (a) the statement of work to be performed; (b) security requirements, if any; (c) ceiling price or amount of the order,

including all charges and travel authorizations, if any; and (d) any other applicable instructions. Such task orders will incorporate into this agreement by reference.

**17. SCMIC Obligations:** Nothing herein shall be construed as an obligation of SCMIC to issue any tasks hereunder and the limit of SCMIC's liability shall extend only to such task orders as it may issue. Task orders, when issued, are subject to review and acceptance by CTA, which shall accept by signing and returning a copy of the task order in the space so provided.

**18. Compensation:** SCMIC will pay CTA in accordance with the terms indicated in Attachment A, which is a part of this agreement. CTA shall submit requests for payment indicating achievement of the pertinent milestones shown therein to the SCMIC Project Manager for certification and payment. All such requests for payment for the initial Statement of Work (attached) must be submitted prior to 15 September 2005. Requests for payment relative to this initial Statement of Work submitted after 30 September 2005 will not be honored.

**19. Independent Contractor:** CTA shall be deemed at all times to be an independent contractor. Neither CTA nor its personnel shall at any time, or for any purpose, be considered employees or agents of SCMIC, the state of Montana, or any of the counties involved. SCMIC is hereby contracting with CTA for the services described in the Statement of Work and CTA is not required to perform the services during a fixed hourly or daily time. If the services are performed at SCMIC premises, those of any State or local government entities, or those of any of the non-governmental parties involved, CTA's time spent at those premises is to be at the discretion of CTA; subject to normal business hours and security requirements. CTA hereby confirms to SCMIC that SCMIC will not be required to furnish or provide any training to CTA to enable CTA to perform the services required hereunder. The services are to be performed by CTA. SCMIC or any other State, Federal or non-governmental entity involved in performance under this contract shall not be required to hire, supervise or pay any assistants to help CTA perform the services under this agreement. The management of the work, including but not limited to the order or sequence in which it is performed, shall be under the control of CTA, subject to compliance with the Statement of Work. Except to the extent that CTA's work must be performed on or with a computer of SCMIC or one or more of the State, federal, county, town or non-governmental entities involved in performance under this agreement, all materials used in providing the services shall be provided by CTA. CTA shall provide any insurance coverage that is required in the normal course of business as well as any specialized insurance that is specifically called for in this agreement. The parties understand and agree that, as an independent contractor, CTA does not have any authority to sign contracts, notes, obligations, or make purchases, or to acquire or dispose of any property for or on behalf of SCMIC or any other of the

governmental and non-governmental entities involved in the performance of this agreement.

**20. Warranty:** CTA hereby warrants, to the best of its knowledge, information and belief, to SCMIC that the firm is not under any obligation, contract or agreement, nor has the firm previously executed any documents whatsoever, with any person, firm, association, or corporation that would in any manner prevent CTA from giving, and SCMIC from receiving, the full benefit of the firm's impartial consulting services.

**21. Proprietary Information:** CTA agrees that at all times both during the term of this agreement and three (3) years after termination thereof, the firm will hold inviolate and keep secret all knowledge, information, data, trade secrets, inventions and customer lists that have been clearly designated as proprietary by SCMIC or any other entities involved in the performance of this agreement. CTA, under the terms of this agreement, will not disclose such information to any competitor or other individual, corporation or firm except when authorized to do so by SCMIC or the entity involved, in writing. CTA also agrees to abide by all federal and state mandated security regulations and procedures. Nothing herein shall be construed as to preclude CTA from engaging in any occupation or endeavor which will not directly involve the proprietary or security information of SCMIC, the state of Montana or the United States government. CTA agrees to abide by current federal, state and local security laws and regulations.

CTA's obligations with respect to handling and using proprietary information as set forth in this agreement are not applicable to: (1) Information that at the time of disclosure under this agreement is either known to CTA or disclosed in existing publicly available literature or patents; (2) Information that after disclosure under this agreement becomes known to CTA by independent discovery or by casual observation or analysis of information provided by a third party; (3) Information that after disclosure under this agreement becomes known to CTA from a source other than the SCMIC without breach of any obligation by the disclosing party; (4) Information that is or has been furnished by the disclosing party to the Government with "unlimited" rights.

**22. Release of Information:** CTA shall not make any public release of information in any medium concerning this agreement without prior review and approval by SCMIC. Requests for review of any materials proposed for public release in any medium; shall be submitted in writing to the SCMIC Project Manager for approval, which shall not be unduly withheld.

**23. Assignment:** Neither party shall assign, sublet or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this agreement, or any claims, causes of action or rights against the other party arising from or under this agreement; or any proceeds from claims arising from or under this

agreement as security, collateral or the source of payment for any notes or liabilities to the Contractor or any other third party; or any control of any claims or causes of action arising from or under this agreement without written agreement from the other party. The provisions of this paragraph shall survive the completion or termination of this Contract for any reason and shall remain enforceable between the parties.

**24. Non-Solicitation:** SCMIC hereby agrees for the term of this agreement, and for a period of one (1) year thereafter, that SCMIC shall not directly or indirectly, orally or in writing or by any other method of communication, solicit any employee, agent or consultant of CTA, nor encourage any employee, agent or consultant to terminate his or her employment of relationship with CTA.

**25. Waiver:** The failure of either party to this agreement to insist on strict performance of any of the terms and conditions hereof shall not constitute a waiver of any other provisions.

**26. Construction:** Paragraph headings are for convenience only and shall not affect the interpretation of this agreement. If the scope of any of the provisions of the agreement is too broad in any respect whatsoever to permit enforcement to its full extent, then such provisions shall be enforced to the maximum extent permitted by law, and the parties hereto consent and agree that such scope may be judicially modified accordingly and that the whole of such provisions of this agreement shall not thereby fail, but that the scope of such provisions shall be curtailed only to the extent necessary to conform to the law.

**27. Entire Agreement:** This agreement supersedes all previous agreements, both oral and in writing and contains all the terms and conditions of this transaction. All modifications to this agreement must be reduced to writing as amendments and duly executed by both parties hereto.

**SIGNATURES**

In witness whereof, the following parties have executed the Agreement as set forth herein:

**For South Central Montana Interoperability Consortium:**

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Jason Shrauger, Emergency Manager  
Gallatin County

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Date

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William A. Murdoch, Chairman,  
Gallatin County Board of Commissioners

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Date

**SIGNATURES**

In witness whereof, the following parties have executed the Agreement as set forth herein:

**For South Central Montana Interoperability Consortium:**

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Frank R. Ford, Director,  
Madison County Dept. of Emergency Management

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Date

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Frank G. Nelson, Chairman,  
Madison County Board of Commissioners

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Date



**SIGNATURES**

In witness whereof, the following parties have executed the Agreement as set forth herein:

**For South Central Montana Interoperability Consortium:**

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R. E. Seidlitz, Sheriff,  
Meagher County

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Date

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Bernie Lucas, Chairman  
Meagher County Board of Commissioners

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Date

**SIGNATURES**

In witness whereof, the following parties have executed the Agreement as set forth herein:

**For South Central Montana Interoperability Consortium:**

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Frank E. Smith, Coordinator,  
Park County Homeland Security

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Date

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Larry Lahren, Chairman,  
Park County Board of Commissioners

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Date

**SIGNATURES**

In witness whereof, the following parties have executed the Agreement as set forth herein:

**For South Central Montana Interoperability Consortium:**

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Dan Tonrud, Sheriff,  
Sweet Grass County

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Date

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Lloyd Berg, Chairman,  
Sweet Grass County Board of Commissioners

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Date

**SIGNATURES**

In witness whereof, the following parties have executed the Agreement as set forth herein:

**For CTA Communications, Inc.**

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Cheryl S. Giggetts, MBA, PMP  
Vice President, Chief Operating Officer

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Date

**STATEMENT OF WORK (SOW)**

**Attachment A to  
Professional Services Contract  
Dated 28 February 2005**

## **SOUTH CENTRAL MONTANA INTEROPERABILITY CONSORTIUM ASSESSMENT AND PLAN**

### **1.0 Introduction and Issues**

1.1 The South Central Montana Interoperability Consortium (SCMIC) requests the following:

A. User Need Analysis

- Comprehensive user needs assessment to clearly identify capabilities and system performance needed by Consortium users
- Analysis of current and future capabilities / possibilities

B. Current System Capability and Performance Analysis

- Analysis of current system performance and capability including current system propagation and performance analysis and how it translates into future capabilities.
- Analysis of current systems and equipment to assess their reliability and suitability for future communications system upgrades
- Vulnerability assessment to identify weaknesses in current system and to plan for hardening of current and future radio systems

C. System design with component break down based on System Performance drawn from user needs

- Translation of current and future user needs into performance specifications that can be phased in / purchased and implemented consortium wide, county wide and / or geographic and / or functional use areas.
- Functional Use Areas, County Areas, Consortium Area and the integration of each to be functional within the local operating procedures and NIMS
- System design(s) proposed are to be vendor-independent.

D. RFP to implement system design

- Produce an RFP based on performance measurements to acquire future system components.

- 1.2 CTA Communications (CTA) will serve as the overall program manager and will be responsible for meeting the requirements of this agreement and statement of work.
- 1.3 The designated SCMIC Project Director will act as the primary point of contact with CTA for matters relating to the work set forth herein. All invoices, statements of completion and requests for payment will be submitted to the SCMIC Project Director for certification and forwarding to the State Administrative Authority for payment.

## **2.0 Tasks to be Performed**

This Statement of Work (SOW) is an integral part of the Professional Services Contract entered into on February 28, 2005 between CTA and SCMIC, a joint entity of Gallatin, Madison, Meagher, Sweet Grass and Park counties. CTA will perform the following tasks in completion of this statement of work:

- 2.1 **End User Driven Needs Assessment/Analysis.** The critical aspect of the needs assessment and analysis is the need to meet the SCMIC requirements in the following order of importance: Agency – County – Region. The following sections outline the process by which the Needs Assessment/Analysis will be performed.
  - 2.1.1 **Project Work Plan.** Attachment A – SOW and Exhibit AA, outlines the basic project Work Plan.
  - 2.1.2 **Review Existing System Data.** CTA will review current data and information provided by SCMIC in preparation for the Initialization Meeting.

CTA will request existing system and operational data from the SCMIC users and maintenance personnel, as well as the latest information on the present systems and operations, in so far as it may be available.

This will comprise details such as:

- Lists of equipment
- Existing site and facility information
- Special Operational procedures
- Radio Traffic loading numbers
- Future requirements
- Growth projections

- Mutual-Aid Plans
- And others

CTA will review the latest statistical data on calls for service and responses. CTA will also study the implications on the radio system design of applicable staffing levels, special operational requirements, unique dispatch procedures, and interoperability needs.

The CTA teams will request operational and system requirement information to develop parameters such as:

- Radio and Microwave Channel and loading requirements
- Types and capabilities of radio units needed
- Quantities of present and future radios
- Quantities and functions of dispatch consoles
- Other system design elements

CTA understands information can only be provided to extent it is readily recognized and reasonably available to SCMIC.

**2.1.3 Initialization Meeting.** Key representatives of all participating agencies will meet, to mutually agree on specific near term goals and processes. This meeting will last from two to four hours and will be scheduled concurrent with the Surveys and Interviews. Teleconference and e-mail communications with the SCMIC's project manager and associated principals prior to this meeting may be required to facilitate an effective and instructive Initialization Meeting.

An additional goal of this meeting will be to understand the Montana Interoperable Communications environment. This understanding will be obtained via discussions with the participating Counties as well as teleconferences with State and adjacent County representatives. Specific Interoperability activities of interest are:

- Montana State Interoperability Executive Council (SIEC)
  - Southwest Interoperability Project (SWIP)
  - Northern Tier Interoperability Project (NTIP)
  - I-15/90 Corridor Interoperability Communications Project (I-15/90)
- Montana Public Safety Services Bureau
- State of Montana Mutual Aid Assistance Handbook
- Missoula County, MT Interoperability Project
- Big Sky Terrorism Prevention Consortium (BSTPC)

**2.1.4 Survey and Interviews.** CTA's survey team will conduct on-site facility surveys of SCMIC repeater sites for a period of two consecutive weeks. The intent of this time period is to survey as many of the SCMIC sites as possible. If all identified sites cannot be visited during this time frame due to weather conditions which limit access, subsequent visits will be scheduled prior to completion of the project in order to provide for a comprehensive assessment of all such sites within the five county area. During this period, CTA will conduct surveys of existing and potential tower sites identified by the SCMIC to perform a general assessment the following:

- tower condition
- shelter condition
- shelter floor layout
- available utilities
- grounding practices
- back-up power sources: generator, UPS
- placement and quantity of antennas and dishes
- security practices
- radio equipment condition
- site condition

The surveys will document the items described above and assess suitability for inclusion for use in the conceptual system design. Site survey documentation and sketches will be provided to the SCMIC for review and comment. In the event weather conditions preclude visiting all identified sites during the initial survey as outlined previously herein, an interim report will be provided by CTA upon completion of the initial series of surveys, to be followed with full site survey documentation and sketches when the survey of all sites has been completed.

CTA will conduct operational surveys and interviews concurrently with the site surveys and during a two consecutive week period. The interviews will be conducted in up to three centralized locations in each of the participating counties and will be generally allocated in the following manner:

- Madison County: 8
- Park County: 5
- Sweet Grass County: 3
- Meagher County: 2
- Gallatin County: 30



The operational surveys will consists of visiting up to 10 communications centers to assess operations and interview working personnel. These operational surveys will occur within the appropriate County to conduct interviews. Operational survey and interview documentation will be provided to the SCMIC for review and comment.

The active assistance of the SCMIC Project manager will be required in scheduling all site surveys and interviews. CTA will further require the assistance of the appropriate SCMIC representative(s) in facilitating access to sites where standard vehicle transportation is impaired.

- 2.1.5 Radio Traffic Analysis.** CTA will use its computerized Capacity Analysis Model (CAM<sup>SM</sup>), with inputs derived from the Survey and other information provided by the SCMIC, to carefully look at the SCMIC's user requirements to establish the size of the system based on an acceptable Grade of Service projected for the busiest hour of any week. Results will be compared with existing systems to identify any gap between requirements and existing infrastructure. Graphical outputs of these results will also be available to SCMIC upon completion of the analysis.
- 2.1.6 Coverage Analysis.** CTA will use its proprietary Propagation, Coverage, and Loading Analyst (PCALA<sup>SM</sup>) software to develop a Coverage Design based on the current systems throughout the region. Potential augmentation of existing radio sites with new sites located to minimize "dead spots" will be investigated. Operation from within buildings will be incorporated and differentiation used between the types of buildings constructed in various parts of the SCMIC operational areas. Large areas of undeveloped public lands within the SCMIC participants' service areas will be considered. The Coverage Design provided by PCALA<sup>SM</sup> will establish system configuration and identify roughly where new radio sites might be located to best serve the needs of the end users. Graphical outputs of these results will also be available to SCMIC upon completion of the analysis.
- 2.1.7 Vulnerability Assessment.** CTA will review the SCMIC current systems and equipment to identify weaknesses in the following major areas:

- *Availability*, which includes coverage and capacity aspects;
- Reliability*, which looks at redundancy, fault tolerance, failure mechanisms, backup positions, status monitoring;

- *Maintainability*, which examines how easily and how straightforward the maintenance of the system is accomplished;
- *Survivability*, which includes the ability to operate and communicate after a significant natural disaster or man-made attack;
- *Security*, both physical and electronic

**2.1.8 System Attributes.** CTA will establish the operational features that reflect the needs of the SCMIC end user community. Any potential Conceptual System Design(s) identified will be evaluated against their ability to fulfill these System Attributes.

**2.1.9 Site Facilities.** CTA will utilize the information ascertained in the site surveys regarding the physical characteristics of the radio system including towers, equipment shelters, HVAC, site security, power and backup power, grounding requirements, and the general state of housekeeping and maintenance. CTA will identify trade-offs necessary in developing a secure and well-constructed radio site. The process may re-use facilities already located at the site, providing cost reduction opportunities.

**2.1.10 Alternatives Analysis.** CTA will identify a number of potential upgrade approaches/alternatives that could be considered as meeting the SCMIC's needs. From that list, the most viable approaches will be selected and sufficient analysis and design performed to allow the ranking of these alternatives in order of applicability and value to the SCMIC. The ranking process used will be the CTA proprietary Impact Analysis Process<sup>SM</sup>.

**2.1.11 Impact Analysis Process<sup>SM</sup>.** It is important to have a rigorous decision making process for large capital projects considering multiple possible alternatives. CTA has developed and will utilize our interactive Impact Analysis Process<sup>SM</sup>. CTA will work with the SCMIC to assess the impact on your operations of the presence (or absence) of each attribute established earlier. CTA will then assess the ability of each alternative to support each attribute. Merging these two assessments provides a ranking which, when combined with estimated cost information and CTA recommendations, will enable SCMIC to make an informed decision. This process will provide sufficient resolution(s) to allow the cost/benefit results to be tailored to the SCMIC's budget.

**2.1.12 Initial Opinion of Probable Cost Analysis.** CTA will use its proprietary Cost Budgeting Analyst<sup>SM</sup>, which is based on a composite of actual costs

experienced from recent procurements of similar systems, to develop a Rough Order of Magnitude (ROM) Opinion of Probable Costs Analysis for the top two to three system design alternatives. CTA will meet informally with SCMIC to discuss costs, design, and trade-offs. This critically important meeting will allow SCMIC representatives and CTA to come to an agreement on one system alternative and begin the Conceptual System Design.

**2.1.13 Conceptual System Design.** CTA will develop a single Conceptual System Design for the agreed upon system alternative. Emphasis will be on portable radio operation system wide; improved interoperability within and among the SCMIC counties along with appropriate neighboring, state and federal agencies; “layered” systems such that they provide interoperability without sacrificing independence and autonomy; compatibility with current operations and with the ability to use or re-use current equipment to the extent reasonable; the ability to provide both voice and data communications with emergency alerting and paging; and reliable and robust and fault tolerant design. The Conceptual System Design will also consider Emergency Alerting (paging) for first responders.

**2.1.14 Detailed Opinion of Probable Cost Analysis.** CTA’s will use its proprietary Cost Budgeting Analyst<sup>SM</sup>, which is based on a composite of actual costs experienced from recent procurements of similar systems, to develop detailed Opinion of Probable Costs Analysis for the initial purchase costs as well as ongoing maintenance costs of the Conceptual System Design. The results will be provided in a format compatible with that required by your budgeting process, including the ability to segment purchases into manageable pieces that can be used to support funding and grant requests. During the development of the Cost Analysis, CTA will meet informally with SCMIC to discuss initial costs, life cycle costs, design, and potential trade-offs. This critically important meeting will provide the SCMIC representatives with an advanced understanding of the costs involved and will allow CTA to finalize the agreed upon Conceptual System Design and develop a Transition Plan. Calculated outputs of these results will also be available to SCMIC upon completion in their native Word and Excel formats.

**2.1.15 Transition Plan.** Recognizing this plan will likely be implemented in incremental phases, as monies become available, CTA will develop a transition plan with a timeline that supports phased budget estimates, including identification of risks involved in the phased implementation

with potential mitigation strategies. Emphasis will be on maintaining continuity of operations, cost containment, and continuous improvement of interoperability. Part of this plan will consider priorities of implementation, with critical concerns addressed first.

**2.1.16 Draft Report.** CTA will write a conceptual “Needs Assessment” report describing current conditions, the conceptual system design, the process used to arrive at that design, the recommended project approach, and a preliminary transition plan. Up to ten bound copies of this report will be provided to the SCMIC project manager for review. CTA will provide five copies of the Cost Analysis to the SCMIC project manager under separate cover. SCMIC is requested to provide a consolidated list of changes or comments regarding the Draft Report to CTA during the time-frame stated in the project schedule provided in Exhibit AA.

**2.1.17 Final Report.** CTA will provide a Final Report Needs Analysis Report, upon approval of the Draft Report. This document will include a focused Executive Summary directed to the SCMIC’s management. Up to twenty bound copies and ten CD-ROMs (in electronic .pdf format) of this report will be provided to the SCMIC project manager. The focused Executive Summary can be a stand alone document, or can be used to augment the Formal Presentation. Graphical and/or calculated outputs of these documents will also be available to SCMIC upon completion in their native formats.

**2.1.18 Formal Presentation.** CTA will develop and provide a Formal Presentation to the SCMIC’s County Commissioners and the five primary county representatives. A working level presentation, which will be more technical and field oriented, will be provided earlier the same day for the SCMIC’s Project Manager and participating counties designated representatives.

**2.1.19 Status Reports.** Throughout the Needs Assessment/Analysis phase, CTA will provide monthly status reports describing activities accomplished in the past month, activities scheduled for the next month, problems encountered, solutions completed, and “red flag” items. This will be one document combining the status of the Needs Assessment/Analysis phase and the RFP/Specification Phase.

## 2.2 RFP and Specifications

To meet the required project end date of 2 September 2005, the RFP and Specification Phase will occur in parallel to the Needs Assessment and Analysis Phase.

CTA will informally advise SCMIC on the recommended RFP process and on the terms and conditions. However, CTA will have primary responsibility for the technical portion of the procurement documentation and the SCMIC will have primary responsibility for the legal portion of the procurement documentation.

**2.2.1 Finalize the Design.** CTA will finalize the Conceptual System Design into a Preliminary System Design suitable for forming the basis of the procurement specifications. This will also entail a review of the current FCC and FAA licenses.

**2.2.2 System Specifications.** CTA will develop the technical specifications portion of the procurement documentation for the Radio System upgrades. State-of-the-art integrated wide-area radio systems can be complex, and by necessity unique to each situation. The functional/operational approach to specifications allow system proposers the latitude to design around their own configurations, while retaining the essential attributes and operational characteristics developed specifically for the SCMIC, consistent with the SCMIC's overall telecommunications plan. Minimum requirements for future radio system will include, but not be limited to:

- Equal to or greater than current level of interoperability both within the Consortium and its component counties, and with applicable federal and state agencies as set forth by MT PSSB and the SIEC
- P25 compliant to include backward compatibility, forward compatibility, and compatibility with existing systems
- Reliable and Robust
- Redundant
- VHF high band
- Multi-Mode Operation (narrow band and wide band)
- Compatible with current operating procedures and equipment to include both digital and analog.
- Functionally layered systems
- Portable to portable communications within functional and geographic areas

**2.2.3 Site Facilities Requirements.** CTA will include system security by carefully designing a logical and intuitive failure hierarchy into the system

by including survivability. CTA will also incorporate system monitoring and physical security into the overall Physical Facilities (buildings, towers, primary/backup power, HVAC, site security, fire protection, etc.) specifications. The Site Facilities specifications will be part of the procurement documentation for a turnkey system contract.

- 2.2.4 System Pricing.** CTA will provide detailed pricing forms as part of the specification document. These detailed pricing forms will require the vendors to provide price breakdowns for specific equipment, installation, maintenance, as well as engineering and implementation management costs. This will allow CTA and SCMIC to determine and compare the actual life cycle costs of the proposed systems.
- 2.2.5 Evaluation Criteria.** CTA will assist the SCMIC project manager in developing evaluation criteria including our recommendations for weighted evaluation factors and an overall scoring system. If the evaluation criteria are included in the procurement documentation, it will establish vendor concurrence with the process for the record.
- 2.2.6 Draft Specifications.** CTA will provide to the SCMIC project manager up to ten bound copies of the technical portion of the specifications in draft form for the SCMIC's review and comment. SCMIC is requested to provide a consolidated list of changes or comments regarding the Draft Specifications to CTA during the time-frame stated in the project schedule provided in Exhibit AA.
- 2.2.7 Final Specifications.** CTA will revise the Draft Specifications, incorporating SCMIC requirements and comments, and approved revisions resulting from the vendor review. CTA will provide to the SCMIC project manager up to eight bound copies of the Procurement Package including if requested SCMIC terms and conditions and other required procurement documentation provided to us in electronic format. Upon request CTA will also provide the procurement package in electronic (.pdf) format on a CD-ROM. The procurement pricing section will typically be provided also in Excel format to facilitate evaluation.
- 2.2.8 Status Reports.** Throughout the Needs Assessment/Analysis phase, CTA will provide monthly status reports describing activities accomplished in the past month, activities scheduled for the next month, problems encountered, solutions completed, and "red flag" items. This will be one document combining the status of the Needs Assessment/Analysis phase and the RFP/Specification Phase.

### **3.0 Follow-on Services (optional tasks)**

Tasks specific to this phase will be developed as required to meet the needs of SCMIC. These tasks will be based upon a fee schedule agreed upon during contract negotiations or as part of individual task order negotiations. Types of tasks could include, but are not limited to:

#### **3.1 Subphase - Needs Assessment**

- 3.1.1 Additional survey team effort beyond the one week described in the Methodology.
- 3.1.2 Additional coverage analyses beyond twenty-five.
- 3.1.3 Conceptual Design and Cost analysis for two or more System Alternatives.
- 3.1.4 Detailed documentation of the existing system, beyond that described in Section 2 of the Scope of Work. Detailed short term planning, design, budgeting, or recommendations for modifications and improvements to the existing system, maintenance, and operations beyond inexpensive upgrades that provides obvious cost-effective improvements.
- 3.1.5 Inclusion of jurisdictions and joint shared-use systems with entities operating generally outside the boundaries of the counties that make up the SCMIC. System plans for school and transit radio operations and equipment beyond those described in the Methodology.
- 3.1.6 Detailed structural analysis or design for buildings, towers, or other facilities, or detailed definition and design for a major expansion of an existing building. Subsurface investigation for new buildings or towers.
- 3.1.7 Detailed analysis of the effect of towers on local AM broadcast stations or corrective action when warranted.

- 3.1.8 Plans and designs for 9-1-1, GIS, CAD, AVL, ECC dispatch centers, and EOC facilities and systems beyond those that involve simple operational interface with the radio system.
- 3.1.9 Technical assistance in the preparation of FCC and FAA licenses. FCC waivers or pursuit of radio channels by extraordinary means (beyond standard application to the FCC). Attorneys fees, defense against unexpected interference from or to existing licensees, special temporary authority (STA), multiple coordination and application efforts. Extraordinary circumstances may require sub-contracting to a legal firm that specializes in such activities.

### **3.2 Subphase - RFP and Specifications**

- 3.2.1 Kick-off meeting with project stakeholders.
- 3.2.2 Assistance in preparation of local permitting documentation, including preparation of the necessary drawings and blueprints.
- 3.2.3 Detailed specifications for multiple technologies or multiple configurations. This includes evaluation of the responding proposals in the next phase. The Methodology contained herein assumes that the specifications will be focused on a single conceptual design.
- 3.2.4 Separate the Physical Facilities – or other aspects of the system – into separate procurements. This includes managing and oversight of these separate procurements (and separate vendors) in later phases.
- 3.2.5 Multiple issuance of draft specification documentation.
- 3.2.6 Inclusion of more than three vendors in the vendor review process.

### **3.3 Phase - Project Implementation**

#### **3.3.1 Subphase - Procurement**

The Procurement Phase entails the period beginning with the issuance of the system specifications, and concludes with the signing of the contract between the SCMIC and the system supplier. The procurement process will have been defined prior



to issuing the procurement documentation, and should be carefully and strictly followed in order to minimize vendor protest. Typical procurement elements consist of:

- Pre-Proposal Conference
- Proposal Evaluation
- Technical Evaluation
- Price Evaluation
- Evaluation Report
- Executive Presentation
- Negotiate Contract Award

### 3.3.2 Subphase - Implementation

The Implementation Phase entails the period beginning immediately after the signing of the contract between the SCMIC and the system supplier, and concludes when the system is ready for acceptance. Typical implementation elements consist of:

- Detailed Design Review Meeting (DDR)
- Pre-Construction Conference
- Assist in Site Acquisition
- FCC and FAA License Preparation
- Monitor and Administer Site Construction
- Monitor and Administer the Radio Systems Installation
- Develop Test Plans

### 3.3.3 Subphase - Acceptance

The Acceptance Phase entails the period beginning with the system staging tests, includes inspection of the installation at each site, and concludes with the acceptance of the project after cutover. All phases of the project are linked by CTA with the ultimate result being that the Acceptance Tests demonstrate the initial Systems Attributes developed at the beginning of the project. Typical acceptance elements consist of:

- Staging Tests
- Facility and Infrastructure Inspections
- Acceptance Tests
- Test Report
- Thirty-Day Operational Tests/Cutover
- Review Record (As-Built) Drawings
- Monitor/Coordinate Training
- Status Reports

### 3.4 Project Management and Administration

- 3.4.1 Additional project management effort, teleconferences, meetings, status reports, re-mobilization effort, etc as a result of project delays.
- 3.4.2 Additional hard copies of any reports beyond those described in the Methodology.
- 3.4.3 Multiple presentations, over multiple days.
- 3.4.4 Additional review meetings beyond those described herein. This applies to all phases.
- 3.4.5 Program Coordination & Integration assistance.

## 4.0 Schedule

This SOW assumes execution and notice to proceed is received by March 1, 2005 and will be successfully completed by September 2, 2005 in accordance with the schedule shown in Exhibit AA. This schedule may be adjusted based upon input from SCMIC during the Initialization meeting (Task 1.3). At the time of signing, however, no adjustment of the final completion date for the work herein prescribed is anticipated.

## 5.0 Staffing

Cheryl S. Giggetts, MBA, PMP, will serve as Project Director for CTA. Cheryl can be reached at:

**Cheryl S. Giggetts, MBA, PMP**

CTA Communications, Inc.

P.O. Box 4570

20715 Timberlake Road, Suite

Lynchburg, VA 24502

Phone: 434-239-9200

Cell Phone: 434-258-8427

Alpha/Numeric Pager: [4342588427@messaging.sprintpcs.com](mailto:4342588427@messaging.sprintpcs.com)

Fax: 434-258-9221

Email: [cgiggetts@ctacommunications.com](mailto:cgiggetts@ctacommunications.com)

James Mike Dye, ENP will serve as the overall Program Manager as well as CTA's leading subject matter expert. Both parties can be reached at:

**Mike Dye, ENP**

CTA Communications, Inc.  
P.O. Box 4570  
20715 Timberlake Road, Suite  
Lynchburg, VA 24502  
Phone: 434-239-9200  
Fax: 434-258-9221  
Email: [jdye@ctacommunications.com](mailto:jdye@ctacommunications.com)

Frank Ford will serve as Project Director for SCMIC. Frank can be reached at:

**Frank R. Ford**

Madison County Director of Emergency Management  
PO Box 278  
Virginia City, MT, 59755  
Phone: 406-843-4253  
Cell Phone: 406-596-0171  
Fax: 406-843-5268  
Email: [homesec@3rivers.net](mailto:homesec@3rivers.net)

**6.0 Costs** (Not to exceed)

**6.1 Professional Fees**

1.1	Needs Assessment/Analysis:	\$199,040.00
1.2	RFP and Specifications:	<u>\$ 82,844.00</u>
	TOTAL FEES:	\$281,884.00

**6.2 Schedule of Payments**

1.1	Needs Assessment/Analysis:	
Month 1	Initialization Meeting/Interviews/Surveys	\$49,760
Month 2	Impact Analysis / Attributes Assessment	\$45,760
Month 3	Cost Benefit Meeting	\$47,760
Month 4	Draft Report	\$35,760
Month 5	Final Report	\$20,000

1.2	RFP and Specifications:	
Month 3	Specification Initialization	\$18,000
Month 4	Final Design	\$22,422
Month 5	Draft & Final Specifications	\$22,422
Month 6	Final Specifications	\$20,000

### 6.3 Basis of Professional Fees

6.3.1 The stated professional fees are based on the project schedule (Exhibit AA). If any portion of the project is delayed more than 60 days, CTA may request the established fees be adjusted to provide for additional effort (services and expenses) resulting from or arising out of the delay, and for escalation of costs and labor rates for the delayed portion of the project.

6.3.2 Schedule of Payments: Association of a portion of the fee with the described milestone does not imply that said portion of the fee is the value of that milestone nor of any deliverable described in that milestone. Should CTA receive a request to modify the scope of work, CTA will provide a fee change quotation in accordance with the contract. Once an agreed fee is established, CTA will provide a modified schedule of payments. Payment for each billing milestone is expected with 30 days.

6.3.3 The stated professional fee includes expenses for tasks and travel as described in the proposal. Services authorized by the SCMIC outside the scope described herein will be billed at the stated billing rates provided in this proposal. Travel and Living Expenses and other direct expenses authorized by the SCMIC outside the scope described herein will be billed at actual cost times a G&A factor of 1.2.

6.3.4 For services rendered after December 31, 2005 an escalation factor of 5% per year will apply to the hourly rates and services rates provided herein.

6.3.5 For time and materials contracted services through December 31, 2005 the following rates apply:

Project Executive	\$178.50/hour
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Project Manager	\$157.00/hour
Senior Communications Engineer	\$145.00/hour
Senior Operations Specialist	\$131.00/hour
Senior Communications Specialist	\$112.50/hour
Staff Communications Engineer	\$103.50/hour
Operations Specialist	\$100.00/hour
Communications Specialist	\$91.00/hour
Technical Writer/Production Coordinator	\$73.00/hour
Drafting	\$62.00/hour
Clerical	\$53.00/hour
Expert Witness	\$365.00/hour

Travel and Living expenses and other direct expenses will be invoiced for actual expenses times a factor of 1.20.

For services rendered after December 31, 2005 an escalation of 5% per year will apply.

## **7.0 Assumptions and Constraints**

This Statement of Work assumes that all the participating parties entered into the agreement in a spirit of good faith and intent to perform. The SOW assumes that CTA will perform all of the tasks as called out in Section 2.0, excluding optional tasks. This program, including all research, analyses, and recommendations, is limited to the five county SCMIC area and will include its interface with appropriate federal, state, and local entities. The deletion of a task or significant change in scope of one or more tasks may affect the overall price.

This scope of work and the extent of SCMIC and CTA responsibilities are based on the following:

### **7.1. SCMIC Considerations:**

- 7.1.1 SCMIC will appoint an active project manager who will be the single point of contact for this project. This individual will coordinate all activities for the SCMIC, Consortium Agencies, Consortium Law Enforcement, and the non-Consortium entities.
- 7.1.2 SCMIC will provide review and approval of submittals and draft documents according to the schedule provide in Exhibit AA, and respond with consolidated comments.

- 7.1.3 SCMIC will provide the terms and conditions and all specification boilerplate information in the procurement.
- 7.1.4 SCMIC will provide facilities for interviews. SCMIC will provide a knowledgeable individual to accompany CTA's field survey person to equipment sites and communications centers.

## **7.2. CTA Considerations:**

- 7.2.1 Plans and designs for 9-1-1 systems will be generally those which involve operational interface with the radio, the CAD, and related dispatch systems.
- 7.2.2 Specifications developed by CTA will be provided to the SCMIC in hard copy and .pdf form for internal and external distribution. While portions of the specifications may be provided to the SCMIC in modifiable electronic format, for the convenience of the project and at the option of CTA, such files are for SCMIC internal use only, and may be distributed outside the SCMIC only with CTA permission and with the inclusion of CTA restrictions on the use of such files, as this is a liability issue for CTA.
- 7.2.3 The SOW and professional fees are based on sufficient review and information gathering meetings at the SCMIC's counties to obtain the necessary information and make the necessary decisions pertaining to the project. CTA includes the following visits as sufficient for the project, and has based this SOW accordingly:

	<u>Visits</u>	<u>CTA People</u>
Phase Needs Assessment/Analysis		
Initialization Meeting	1	3
Interviews & Survey	2	2
Initial Cost/Benefit Meeting	1	2
Detail Cost / Benefit Meeting	1	2
Executive Presentation	1	2
Phase RFP and Specifications		
Review Meeting	1	2

- 4. Digital communication and the use of computer software.

CTA uses the following office software:

- Microsoft Word 2003
- Microsoft Excel 2003
- Microsoft Access 2003
- Microsoft PowerPoint 2003
- Microsoft Project Professional 2003
- AutoCAD 2000
- CA Process Continuum
- Adobe Acrobat, version 6

It is possible to provide documentation produced by our computer systems in other electronic formats. Such files will typically be provided as export files. In such cases, the controlling documentation will be a hard copy. CTA cannot be held responsible for the effects of exporting files to the formats of the other computer systems, which might result in format, reference or calculation errors.

While e-mail is essential in intercommunicating between individuals working on a project on a day-to-day basis, such use is essentially conversational and, therefore, decisions made and business transacted must be ratified and confirmed by the lead personnel and project managers for SCMIC and for CTA. Since e-mail files can be modified at any stage of the process, they do not provide an effective paper trail, and should not be used in lieu of a careful documentation process.

E-mail is also useful in conveying documents and deliverables in electronic format, and, for this purpose, a formal transmittal system should be in place to track and document such conveyances.

**8.0 Signatures**

By signature on the next succeeding page the signatories certify their agreement and intent to comply with the terms of this Statement of Work.

**Approved by CTA Communications, Inc.:  
work**

**Approved and authorized for  
by BSTPC representative:**

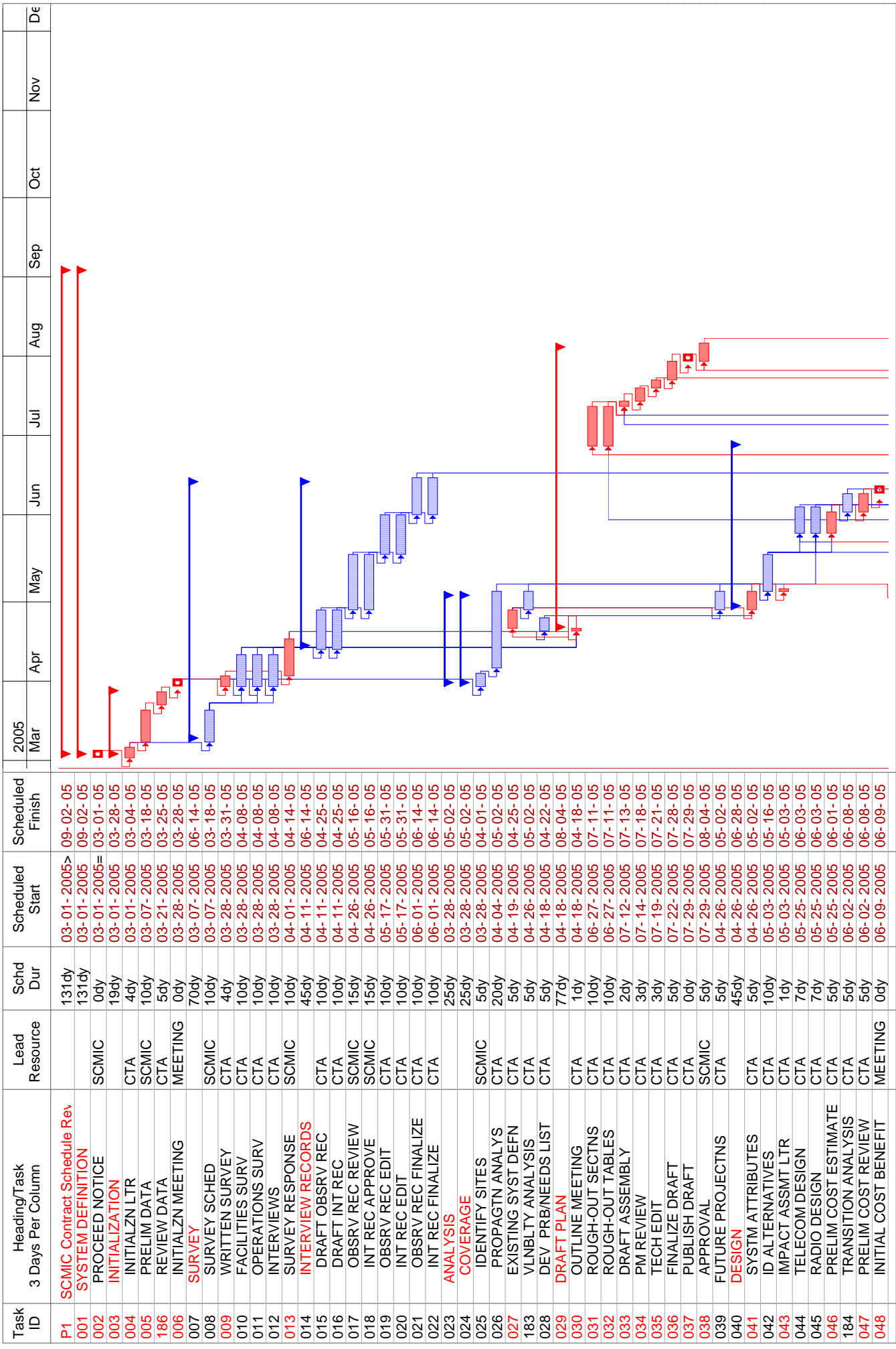
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Cheryl S. Giggetts, MBA, PMP  
Vice President  
Chief Operating Officer  
February 28, 2005

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Frank R. Ford  
SCMIC Project Director  
  
February 28, 2005





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